

**WHAT IS CLAIMED IS:**

1       1.     Apparatus for remote inspection of a pressurized pipeline fluid, said apparatus  
2     comprising:

3                 a detector in communication with the pipeline fluid for measure of a predetermined  
4     internal condition of the pipeline; and

5                 an electronic circuit in communication between the detector and a remote central  
6     station for issue of a wireless signal to the remote central station, the wireless signal  
7     including information about the predetermined internal condition.

1       2.     The apparatus of claim 1 wherein the electronic circuit is adapted to issue a wireless  
2     signal upon detection of the predetermined internal condition.

1       3.     The apparatus of claim 1 wherein the electronic circuit is adapted to issue a wireless  
2     signal upon receipt of a signal from the remote central station.

1       4.     The apparatus of claim 1 wherein the predetermined internal condition comprises an  
2     out of range pressure condition of the pipeline fluid.

1       5.     The apparatus of claim 4 wherein the detector comprises a fluid pressure gauge in  
2     communication with the pipeline fluid for measure and display of a pressure condition of the  
3     pipeline fluid.

1       6.     The apparatus of claim 1 wherein the detector comprises a flow meter in  
2     communication with the pipeline fluid for measure the rate of flow of the pipeline fluid and  
3     the predetermined internal condition comprises the rate of flow of the pipeline fluid.

1       7.     The apparatus of claim 6 wherein the electronic circuit is configured to issue a  
2     wireless signal upon detection of a rate of flow below a predetermined level.

1       8.     The apparatus of claim 1 further comprising a filter unit for filtering the pipeline  
2     fluid, wherein the detector is mounted to the filter unit.

1       9.     The apparatus of claim 1 further comprising a docking station, wherein the detector is  
2     electrically connected to the docking station.

1       10.    The apparatus of claim 1 wherein the electronic circuitry comprises electronic  
2     transmission and reception circuitry for two way communication with the remote central  
3     station.

1       11.    The apparatus of claim 1 further comprising:  
2            a second detector for detection of a second predetermined condition.

1       12.    The apparatus of claim 11 wherein the second detector is in communication with the  
2     pipeline fluid and is adapted to measure an internal condition of the pipeline fluid and the  
3     second predetermined condition comprises a second predetermined internal condition of the  
4     pipeline, and wherein the electronic circuitry is adapted to issue a wireless signal to the  
5     remote control station that includes information about the second predetermined internal  
6     condition. .

1       13.    The apparatus of claim 12 wherein the second predetermined condition is the rate of  
2     flow of fluid through the pipeline and the second detector comprises a flow meter.

1       14.    The apparatus of claim 11 wherein the second predetermined condition is a  
2     predetermined external condition. -

1       15.    The apparatus of claim 14 wherein the predetermined external condition comprises  
2     presence of an obstruction to viewing of or access to the detector.

1       16.    The apparatus of claim 14 wherein the predetermined external condition comprises  
2     lack of presence of the first detector in its installed position.

1       17.    Apparatus for remote inspection of a pressurized medical fluid container comprising:  
2            a detector in communication with the pressurized fluid for measure of a  
2     predetermined internal condition of the container; and

3                   an electronic circuit in communication between the detector and a remote central  
4                   station for issue of a wireless signal to the remote central station, the wireless signal  
5                   including information about the predetermined internal condition.

1       18.    The apparatus of claim 17 wherein the electronic circuit is adapted to issue a wireless  
2                   signal upon detection of the predetermined internal condition.

1       19.    The apparatus of claim 17 wherein the predetermined internal condition comprises an  
2                   out of range pressure condition of the fluid.

1       20.    The apparatus of claim 17 wherein the electronic circuit is configured to issue a signal  
2                   upon detection that the pressure of the fluid is at or below a predetermined level.

1       21.    The apparatus of claim 19 wherein the detector comprises a fluid pressure gauge in  
2                   communication with the container fluid for measure and display of a pressure condition of  
3                   the fluid.

1       22.    The apparatus of claim 17 further comprising a docking station, wherein the detector  
2                   is electrically connected to the docking station and the electronic circuit is at least partially  
3                   contained within the docking station.

1       23.    The apparatus of claim 17 further comprising:  
2                   a second detector for detection of a predetermined external condition.

1       24.    The apparatus of claim 23 wherein the second detector comprises an electronic tether  
2                   in electrical communication with the electronic circuit.

1       25.    The apparatus of claim 24 wherein the medical fluid container is located in an  
2                   installed position and the predetermined external condition comprises the lack of presence of  
3                   the medical fluid container in its installed position.

1       26.    The apparatus of claim 25 wherein the electronic circuit is adapted to issue a signal  
2                   upon detection of the lack of presence of the medical fluid container in its installed position.

1       27. The apparatus of claim 23 wherein the second detector comprises a sonic sensor for  
2       detecting presence of an obstruction to or viewing of the medical fluid container.

1       28. The apparatus of claim 23 further comprising:  
2            a third detector for detection of a second predetermined external condition.

1       29. The apparatus of claim 28 wherein the second detector comprises an electronic tether  
2       for detecting the lack of presence of the medical fluid container in an installed position and  
3       the third detector comprises a sonic sensor for detecting presence of an obstruction to or  
4       viewing of the medical fluid container.

30. Apparatus for remote inspection of a container adapted to hold pressurized  
commercial or industrial gas, the apparatus comprising:

1            a detector in communication with the pressurized fluid for measure of a  
2       predetermined internal condition of the container; and  
3            an electronic circuit in communication between the detector and a remote central  
4       station for issue of a wireless signal to the remote central station, the wireless signal  
5       including information about the predetermined internal condition.

1       31. The apparatus of claim 30 wherein the electronic circuit is adapted to issue a wireless  
2       signal upon detection of the predetermined internal condition.

1       32. The apparatus of claim 30 wherein the predetermined internal condition comprises an  
2       out of range pressure condition of the fluid.

1       33. The apparatus of claim 30 wherein the electronic circuit is configures to issue a signal  
2       upon detection that the pressure of the fluid is at or below a predetermined level.

1       34. The apparatus of claim 32 wherein the detector comprises a fluid pressure gauge in  
2       communication with the container fluid for measure and display of a pressure condition of  
3       the fluid.

1       35. The apparatus of claim 30 further comprising a docking station, wherein the detector  
2       is electrically connected to the docking station and the electronic circuit is at least partially  
3       contained within the docking station.

1       36. The apparatus of claim 30 further comprising:  
2            a second detector for detection of a predetermined external condition.

1       37. The apparatus of claim 36 wherein the second detector comprises an electronic tether  
2       in electrical communication with the electronic circuit.

1       38. The apparatus of claim 37 wherein the container is located in an installed position and  
2       the predetermined external condition comprises the lack of presence of the container in its  
3       installed position.

1       39. The apparatus of claim 38 wherein the electronic circuit is adapted to issue a signal  
2       upon detection of the lack of presence of the container in its installed position.

1       40. The apparatus of claim 36 wherein the second detector comprises a sonic sensor for  
2       detecting presence of an obstruction to or viewing of the medical fluid container.

1       41. The apparatus of claim 36 further comprising:  
2            a third detector for detection of a second predetermined external condition.

1       42. The apparatus of claim 41 wherein the second detector comprises an electronic tether  
2       for detecting the lack of presence of the medical fluid container in an installed position and  
3       the third detector comprises a sonic sensor for detecting presence of an obstruction to or  
4       viewing of the medical fluid container.